
! 9&2. 12#.&:9<= . 2+9&#

#

64>5#?*@9A* <#?@BC3#DE?#F99=#46G#

K,L. +@#) *+,-. &' 3\$%&' N10%P3*C%#

D9&' #?*. 1H(#! E#75I J5#

)H9&*M#/>G48#7I >,J6>7#

#



-.1%2S#L* =P*<#

;. 1+@2. 2+&' #A9<C#<*2<+*B. @+&#&C+B+C%. @#A+2H#. RH. 0+. 3#' #\$\$%&'()(*+!,-./648(#
6JG4,6JI 63#QO:##65365I 5^54GI]5[I3456736G54I G6#

!"#\$%&'()*+,-

0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. #19&;* <* &1*#9;#2H*#E = * <+1. &#UR**1H,D. &'%. ' *# \$* . <+&' #E0091+. 2+9&(#?9029&(#L E3#

F. = \+0099&(#3(#EPC* @ f+f(#L3(#KC=9&C0(#e3(#` 9* @#)3(#` % +P* <09&(#L3(#\$. = +@9&(#E3(# (#D** ,b+ * <09&(#Q3(#D9A* @#U3(#) * <* f(#N3(#U1922(#Q3(#'' + ' +@Q3(#a#L +@# <#1 3# /456l (#_9B* = P* <83#?%+@C+&' #. # <*0% = * #2H. 2#2* @#S9% <#029<S3#U* = +&. <#0*00+9&# R<*0*&2*C#. 2#2H*#. &&%. #19&;* <* &1*#9;#2H*#E = * <+1. &#UR**1H,D. &'%. ' *# \$* . <+&' # E0091+. 2+9&(#?9029&(#L E3#

#a#U%#D3#/456l (#_9B* = P* <83#71F%: 4'3G1 %&1>I9: 41251: 4' (: !: !I ')': * <%)! 9: >'5'><%)&!V'4\$!' # \$%&'%!!??21%4F 1: 4!@ (: &'>12%4' (: #U* = +&. <#0*00+9&#R<*0*&2*C# . 2#2H*#. &&%. #19&;* <* &1*#9;#2H*#E = * <+1. &#UR**1H,D. &'%. ' *# \$* . <+&' #E0091+. 2+9&(# ?9029&(#L E3#

U%&(#D3#a# #/456l (#_9B* = P* <83#9: 3(2# (2%41!04\$'3&!B!O! O!': !@)': '3%)! C13'&' (: GS%Y': *!02(31&&!''!7<251+!(6!73\$ ()G1 %&1>!7A0&'!': !@%)'6(2: '%3#U* = +&. <# 0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. #19&;* <* &1*#9;#2H*#E = * <+1. &#UR**1H,D. &'%. ' *# \$* . <+&' #E0091+. 2+9&(#?9029&(#L E3#

KC=9&C0(#e3(#` * <<. <C(#K3(#` <* * &(#N3(#` % +P* <09&(#L3(#\$. = +@9&(#E3(#\$. <= 9&(#E3(# j#N9H&09&(#e3(#D9A* @#U3(#F. = \+0099&(#.#(U1922(#Q3#' + ' +@Q3#/456] (# _9B* = P* <83#8 (V!> (!9!)(Y[!'! !3<)4<2%)!3(F #141: 31!\&1)6'1/]#U* = +&. <#0*00+9&# R<*0*&2*C#. 2#2H*#. &&%. #19&;* <* &1*#9;#2H*#E = * <+1. &#UR**1H,D. &'%. ' *# \$* . <+&' # E0091+. 2+9&(#D90#E&' * @*0(#! E3# #

#a#U%&(#D3#/456] (#_9B* = P* <83#71F%: 4'3GD%&1>!)%: * <%*1!': 41251: 4' (: !: !: ! 6(<2!D')': * <%)!': >'5'><%)&!V'4\$!%# \$%&'%!!??21%4F 1: 4!3 (: &'>12%4' (: &!B! 32(&&G)': * <'&4'3!42%: &612!1661343#U* = +&. <#0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. # 19&;* <* &1*#9;#2H*#E = * <+1. &#UR**1H,D. &'%. ' *# \$* . <+&' #E0091+. 2+9&(#D90#E&' * @*0(# ! E3#

#a#U1HA. P(#U,V3#/456] (#_9B* = P* <83#? \$1!166134'51: 1&&!(6!>'2134!%441: 4' (: ! 42%': ': *!%: >!4\$1!'F #)'3%4' (: &!6(2!21%>': *!3(F #21\$1: &' (: !'' !3%&1!&4<>+3#) 902* <# 0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. #19&;* <* &1*#9;#2H*#E = * <+1. &#UR**1H,D. &'%. ' *# \$* . <+&' #E0091+. 2+9&(#D90#E&' * @*0(#! E3#

#a#U%&(#D3#/456] (#_9B* = P* <83# ^ 8 _G9@` !(2'1: 4%41>!%&&1&&F 1: 4!6(2! 3(*: '4'51G3(F F<: '3%4' (: !>'&(2>12&L!OW%F': ': *!>'&3(<2&1!#2(6'3'1: 3+!': ! ': >'5'><%)&!V'4\$!?! I3#) 902* <#0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. #19&;* <* &1*#9;#2H*# E = * <+1. &#UR**1H,D. &'%. ' *# \$* . <+&' #E0091+. 2+9&(#D90#E&' * @*0(#! E3#

#a#U%&(#D3#/456] (#O129P* <83#@2 (&&G)': * <'&4'3!42%: &612!(6!4\$12%# +!166134! M@A?OPI!': !D')': * <%)!': >'5'><%)&!V'4\$!%# \$%&'%!!%6412!&42(Y1/#U* = +&. <#0*00+9&# R<*0*&2*C#. 2#2H*#7J2H#E&&%. #! 9&;* <* &1*#9;#E = * <+1. &#! 9&' <*00#9;#F*H. P+@2. 2+9&#

L *C+1+&*(#E2@ &2.(#` E3#

#a#J%&3D3#/456G(#_9B* =P* <83#@2(&&6)': * <'&4'3!42%: &612!(6!4\$12%# +!166134!
M@A?OP!': !4\$211!D)': * <%)!': >'5'><%)&!V'4\$!%#\$\$%'%3#U* =+&. <#0*00+9&#R<*0*&2*C#. 2#
2H*#. &&%. @19&,* <* &1*#9;#2H*#E = * <+1. &#UR**1H,D. &'%. ' *#\$* . <+&' #E0091+. 2+9&(#

U* =+&. <#0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. @19&,*<* &1*#9;#2H*#! . @;9<&+. #
UR**1H,D. &' % . ' *#\$* . <+&' #E0091+. 2+9&(#). 0. C*&. (#! E3#

#a#002*<' <* &(N#/456I (#L . <1H83#' !3(F #%2'&(: !(6!>2%V': *!%: >!V2'4': *!(: !
6%3)'4%4': *!V (2>!2142'15%)!': !': >'5'><%)&!V'4\$!%#\$%&'%3#U* =+&. <#0*00+9&#R<*0*&2*C#
. 2#2H*#. &&%. @19&,*<* &1*#9;#2H*#! . @;9<&+. #UR**1H,D. &' % . ' *#\$* . <+&' #E0091+. 2+9&(#
U. 1<. = * &29(#! E3# #

#a#U%&(#D3#/456I (#L . <1H83#71F%: 4'3GI %&1>!A%: *<%*1!9: 41251: 4' (: !': !
I ')': * <%)!9: >'5'><%)&!V'4\$!" #\$\$\$%&'%L! ?21%4F1: 4!@(: &'>12%4' (: &!%: >!@2(&&GA': * <'&4'3!
?2%: &612!0661343#U* =+&. <#0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. @19&,*<* &1*#9;#2H*#
! . @;9<&+. #UR**1H,D. &' % . ' *#\$* . <+&' #E0091+. 2+9&(#U. 1<. = * &29(#! E3#

U%&(#D3#a# #/456I (#L . <1H83#04\$'3&!%: >!0I 0!': !3)': '3%)!#2%34'31L!" !&<251+!(: !
&3\$ ()GD%&1>!7A0&Z!>13'&' (: GF%Y': *!#2(31&&!': !@%)'6(2: '%/#U* =+&. <#0*00+9&#
R<*0*&2*C#. 2#2H*#. &&%. @19&,*<* &1*#9;#2H*#! . @;9<&+. #UR**1H,D. &' % . ' *#\$* . <+&' #
E0091+. 2+9&(#U. 1<. = * &29(#! E3#

#a#` . <* +0(#\$3#/456] (#L . <1H83#?\$1!32(&&G

F (>%)'4'1&3#U* =+&. <#0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. @19&,*<*1*#9;#2H*#! . @;9<&+. #
UR**1H,D. &'%. ' *#\$* . <+&' #E0091+. 2+9&(#E&. H*+=(#! E3#

#/456G(#ER<+@3#A%: * <%*1!#126(2F%: 31!': !': >'5'><%)&!V'4\$!F')>!3(*: '4'51!
'F#%'2F1: 4!%: >!1%2)+!>1F1: 4'%3#U* =+&. <#0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. @
19&,*<*1*#9;#2H*#! . @;9<&+. #UR**1H,D. &'%. ' *#\$* . <+&' #E0091+. 2+9&(#E&. H*+=(#! E3#

#a#b+c* <=%2H(#K3#/456G(#ER<+@3#@ (: 512&%4' (: %)!3(%3\$': *!l' %3')'4%4': *!
3(F F<: '3%4' (: !D14V11: !': >'5'><%)&!V'4\$!%#\$%&'!%: >!4\$1'2!&# (<&1&a3%21*'512&3#
U* =+&. <#0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. @19&,*<*1*#9;#2H*#! . @;9<&+. #
UR**1H,D. &'%. ' *#\$* . <+&' #E0091+. 2+9&(#E&. H*+=(#! E3#

#/456>(#L . <1H83#@2 (&&G)': * <'84'3!*1: 12%)'T%4' (: !l'71F%: 4'3!421%4F1: 4!
42%: &612!166134!': !D)'): * <%)!%#\$%&'%3#U* =+&. <#0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. @
19&,*<*1*#9;#2H*#! . @;9<&+. #UR**1H#D. &'%. ' *#\$* . <+&' #E0091+. 2+9&(#D9&' #?* . 1H(#
! E3#

#/456>(#L . <1H83#^ (2>!2142'15%)!>'66'3<)4+!': !F')>!3(*: '4'51!'F#%'2F1: 4!
%: >!1%2)+!>1F1: 4'%3#U* =+&. <#0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. @19&,*<*1*#9;#2H*#
! . @;9<&+. #UR**1H#D. &'%. ' *#\$* . <+&' #E0091+. 2+9&(#D9&' #?* . 1H(! E3# #

#/456J(#L . <1H83#@ (: &'>12%4' (: &! (6!%&&1&&F1: 4!%: >!421%4F1: 4!': !
D)'): * <%)!%#\$%&'%3#U* =+&. <#0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. @19&,*<*1*#9;#2H*#
! . @;9<&+. #UR**1H#D. &'%. ' *#\$* . <+&' #E0091+. 2+9&(#J. &#-<. &1+019(! E3#

#/456[(#L . <1H83#S%W'F'T1!#%4'1: 4Z&l6<: 34' (: %)!3(F F<: '3%4' (: !
@())%D(2%41!V'4\$!: <2&' : *!&4%66!': !F1>'3%)!&144': * &3#U* =+&. <#0*00+9&#R<*0*&2*C#. 2#
2H*#. &&%. @19&,*<*1*#9;#2H*#! . @;9<&+. #UR**1H#D. &'%. ' *#\$* . <+&' #E0091+. 2+9&(#
D9&' #?* . 1H(! E3#

#/456[(#L . <1H83#A%: * <%*1!#126(2F%: 31!': !: (2F%)!%*': *!%: >!#1 (#)1!
V'4\$!F')>!3(*: '4'51!'F#%'2F1: 4&3#U* =+&. <#0*00+9&#R<*0*&2*C#. 2#2H*#. &&%. @
19&,*<*1*#9;#2H*#! . @;9<&+. #UR**1H#D. &'%. ' *#\$* . <+&' #E0091+. 2+9&(#D9&' #?* . 1H(#
! E3#

#

#/456](#%&*83#?\$1!' &&1&&F1: 4!%: >!421%4F1: 4!3 (: &'>12%4' (: &! (6!
3(*: '4'51!G3(F F<: '3%4' (: !>'&(2>12&!%6412!42%<F%4'3!D2%': !': J<2+3#?\$1!%&&1&&F1: 4!
%: >!421%4F1: 4!3 (: &'>12%4' (: &! (6!3 (*: '4'51!G3(F F<: '3%4' (: !>'&(2>12&!%6412!D2%': !
': J<2+!WH<* ,

#/456](#L.S83#): 42(><34'(:!4(!%&&1&&F1: 4!%: >!421%4F1: 4!': !%#\$%&'%3#
O&*,H9%<#0* =+&. <#0*00+9&#R<*0*&2*C#. 2#2H*#Q*R. <2= * &2#9;#E%C+9@' S#. &C#
UR**1H,D. &'%. '*#). 2H9@' S(#E0+. #T&+B*<0+2S(#W. +1H%&' (#W. +A. &3#

\$%&'()*,-3#455G83#S1:4%)!21#21&1:4%4'(:!(6!&#%4'%)!Y:(V)1>*1!%:>!4\$1!

!9@*' *#9;#\$*. @H#. &C#\$%=. &#U*<B+1*0#/#! \$\$\$U8#

. 3#! \$\$\$U#` <. C*#ERR*. @#! 9 == +22**#	456G,456I#
E15'1V1>!*2%>1!%##1%)!3)%'F&!%: >!21)15%: 4!>(3<F 1: 4&!	
P3#! \$\$\$U#N. 0\#-9<1*#	#
D+,* -+2#N. 0\#-9<1*!7\$%21>!F +!Y: (V)1>*1!%D(<4!	456],456I#
3(F F<: '3%4' (: !3\$%))1: *1!%&&(3'%41>!V'4\$!: (2F%)!%*': *!	#
:&2*<R<9;*00+9&. @#KC%1. 2+9&#/:)K8#N. 0\#-9<1*!	456G,456]#
C151)(#1>!%: '! : 412#2(61&&' (: %)42%': ': *!%34'5'4+!V'4\$!	
3())1%*<1&! : !@887! !	
13#! \$\$\$U#- . 1+@2S#! 9%&1+@#	456>,456G#
C3#! \$\$\$U#KC%1. 2+9&. @) 9@1S#! 9 == +22**# #	456[,456>#
3#` <. C%. 2#! 9%&1+@#	456>,) <*0*&2#

T&+B*<0+2S#! 9%&1+@#a#! 9 == +22**0#

P3 V90*RH#?3#N<3# . &C#L . <S#E&&*#Oh_* . @U2<9*#! *&2*<#t&#
!+2S#9;#! . <09&##